

Python Programming - 2101CS405

Lab - 4

String

01) WAP to check given string is palindrome or not.

In [4]:

```
x = input("Enter String To Check Palindrome or Not")

if x == x[::-1]:
    print("String is plindrome")
else:
    print("String is not palindrome")
```

Enter String To Check Palindrome or Notmalayalam
String is plindrome

02) WAP to reverse the words in given string.

In [6]:

```
string = input("Enter String : ")
s = string.split()[::-1]
l = []

for i in s:
    l.append(i)

print(" ".join(l))
```

Enter String : my name is abhay
abhay is name my

03) WAP to remove ith character from given string

In [2]:

```
string = input("Enter String")
n = int(input("Enter position of character you want remove : "))
if n < len(string):
    new_str = string[:n] + string[n+1:]
    print("The string after removal of i'th character : "+new_str)
else:
```

```
print("position is out of range of string")
```

Enter Stringmy name is abhay

Enter position of character you want remove : 5

The string after removal of i'th character : my nae is abhay

04) WAP to find length of String without using len function.

In [23]:

```
string = input("Enter String")
count = 0

for i in string:
    count+=1
print("Length of String :",count)
```

Enter String

Length of String : 0

05) WAP to print even length word in string.

In [28]:

```
string = input("Enter String")
new_str = string.split(" ")
print("Even Length Word is :")
for i in new_str:
    if len(i)%2==0:
        print(i)
```

Enter Stringmy name is abhay

Even Length Word is :

my

name

is

06) WAP to count numbers of vowels in given string.

In [90]:

```
string = input("Enter String : ")
count = 0
vowel = set("aeiouAEIOU")
for i in string:
    if i in vowel:
        count+=1
print("Vowel in string is :",count)
```

Enter String : abhay

Vowel in string is : 2

07) WAP to convert given array to string.

In [14]:

```
num = int(input("Enter the size of array : "))
string = []
for i in range(0,num):
    string.append(input("Enter String Element of "+str(i)))
print("String is :", ' '.join(string))
```

Enter the size of array : 5

Enter String Element of 0my

Enter String Element of 1name

Enter StringElement of 2is

Enter StringElement of 3abhay

Enter String Element of 4goriya
String is : my name is abhay goriya

01) WAP to find out duplicate characters in given string.

In [32]:

```
string = input("Enter String : ")
count = 1
print("Duplicate characters in given string : ")
for i in range(0,len(string)):
    for j in range(i+1,len(string)):
        if string[i]==string[j] and string[i]!=" ":
            count = count + 1
            string = string[:j] + '0' + string[j+1:]
    if count > 1 and string[i]!='0':
        print(string[i],"-",count)
    count = 1
```

Enter String : my name is abhay goriya jay hind jay bharat
Duplicate characters in given string :
m - 2
y - 5
n - 2
a - 8
i - 3
b - 2
h - 3
r - 2
j - 2

02) WAP to capitalize the first and last character of each word in a string.

In [49]:

```
string = input("Enter String : ")
a = string.split()
new_str = ""
ans = []
for i in a:
    i = i[0].upper() + i[1:-1] + i[-1].upper()
    ans.append(i)
print("String After Capitalize : "+" ".join(ans))
```

Enter String : my name is abhay
String After Capitalize : MY NamE IS AbhaY

03) WAP to find Maximum frequency character in String.

In [74]:

```
# Method 1:
from collections import Counter

string = input("Enter String : ")
res = Counter(string)
res = max(res, key = res.get)
print("The maximum of all characters in String is : "+ str(res))

#Method 2:

# string = input("Enter String : ")
# all_freq = {}
# for i in string:
#     all_freq[i] = all_freq.get(i,0) + 1
#     if i in all_freq:
#         all_freq[i] += 1
```

```
#     else:
#         all_freq[i] = 1
# ans = max(all_freq, key=all_freq.get)
# print("The maximum of all characters in String is : "+ans)
```

Enter String : aaabbbccccc

The maximum of all characters in String is : c

04) WAP to find Minimum frequency character in String.

In [80]:

```
string = input("Enter String : ")
all_freq = {}
for i in string:
    all_freq[i] = all_freq.get(i,0) + 1
ans = min(all_freq, key=all_freq.get)
print("The maximum of all characters in String is : "+ans)
```

Enter String : aabbccd

The maximum of all characters in String is : d

05) WAP to check if a given string is binary string or not

In [89]:

```
string = input("Enter String")
b = {'0','1'}
t = set(string)
if b == t or t == {'0'} or t == {'1'}:
    print("String is Binary String")
else:
    print("String is Not Binary String")
```

Enter String111111000002

String is Not Binary String

In []: